Amendments to the Claims

Please amend the claims as follows:

1. (currently amended) A computer-implemented method for compressing data, the method comprising:

collecting the data to be compressed using at least one probe;

determining difference information as a function of the type of data to be compressed; ~~and~~

responding to the difference information satisfying a size constraint by encoding the difference information with reference to a set of commonly occurring difference values for a type of the data to be compressed;

accumulating the difference information in a buffer; and

compressing the difference information such that the type of probe is independent of the type of data to be compressed.

2. (original) The method of claim 1, further comprising, before determining the difference information, storing an initial counter value for the data to be compressed.

3. (currently amended) The method of claim 1, further comprising: ~~accumulating the encoded difference information in a buffer; and~~

storing the contents of the buffer in a profiling data file in response to the buffer accumulating a predetermined amount of difference information.

4. (cancelled)

5. (original) The method of claim 1, further comprising, if the difference information is timestamp difference information, encoding the difference information as an unsigned quantity with reference to a set of commonly occurring timestamp difference values.

6. (currently amended) The method of claim 1, further comprising, if the difference information is stack difference information[[,]]:

encoding the difference information as an unsigned quantity with reference to a set of commonly occurring stack difference values, and

reconstructing a sign of a ~~the~~ stack difference value from a context of one of: function entry and function exit.

7. (original) The method of claim 1, further comprising, if the difference information is stack difference information, dividing a quantity represented by the difference information by four before encoding the difference information.

8. (currently amended) The method of claim 1, further comprising, if the type of data to be compressed is ~~represents~~ stack data ~~information~~ collected upon entry to and exit from a function, recording a single difference value for the stack data ~~information~~.

9. (currently amended) A computer-implemented method for compressing profiling data, the method comprising:

collecting the profiling data using at least one probe;

determining difference information as a function of the type of ~~collected~~ profiling data;

if the profiling data is timestamp data, encoding the difference information as an unsigned quantity with reference to a set of commonly occurring timestamp difference values; ~~and~~

if the profiling data is stack data[[,]]:

encoding the difference information as an unsigned quantity with reference to a set of commonly occurring stack difference values, and

reconstructing a sign of a ~~the~~ stack difference value from a context of one of: function entry and function exit;

accumulating the difference information in a buffer; and

compressing the difference information such that the type of probe is independent of the type of profiling data.

10. (currently amended) A computer-readable medium having stored thereon computer-executable modules comprising:

at least one probe, configured to collect profiling data during execution of an application; and

a buffer, configured to:

determine difference information as a function of the type of profiling data, ~~and~~

respond to the difference information satisfying a size constraint by encoding the difference information with reference to a set of commonly occurring difference values for a type of the profiling data,

accumulate the difference information, and

compress the difference information such that the type of probe is independent of the type of profiling data.

11. (currently amended) The computer-readable medium of claim 10, wherein the buffer is further configured to, before determining the difference information, store an initial counter value for the profiling data ~~to be compressed~~.

12. (currently amended) The computer-readable medium of claim 10, ~~wherein the buffer is further configured to accumulate the encoded difference information, and~~ wherein the computer-executable modules further comprise a logger, configured to receive and store the contents of the buffer in a profiling data file in response to the buffer accumulating a predetermined amount of difference information.

13. (currently amended) The computer-readable medium of claim 12, wherein the buffer is further configured to~~, in response to accumulating the predetermined amount of difference information, compress the contents of the buffer and~~ transfer the compressed contents of the buffer to the logger.

14. (original) The computer-readable medium of claim 10, wherein the buffer is further configured to, if the difference information is timestamp difference information, encode the difference information as an unsigned quantity with reference to a set of commonly occurring timestamp difference values.

15. (currently amended) The computer-readable medium of claim 10, wherein the buffer is further configured to, if the difference information is stack difference information:~~;~~

encode the difference information as an unsigned quantity with reference to a set of commonly occurring stack difference values, and

reconstruct a sign of a ~~the~~ stack difference value from a context of one of: function entry and function exit.

16. (original) The computer-readable medium of claim 10, wherein the buffer is further configured to, if the difference information is stack difference information, divide a quantity represented by the difference information by four before encoding the difference information.

17. (currently amended) The computer-readable medium of claim 10, wherein the buffer is further configured to, if the type of profiling data is ~~to be compressed represents~~ stack data that is ~~information~~ collected upon entry to and exit from a function, record a single difference value for the stack data ~~information~~.

18. (currently amended) A computer-readable medium having stored thereon computer-executable modules comprising:

at least one probe, configured to collect profiling data during execution of an application; and

a buffer, configured to:

determine difference information as a function of the type of collected profiling data,

if the type of profiling data is timestamp data, encode the difference information as an unsigned quantity with reference to a set of commonly occurring timestamp difference values, ~~and~~

if the type of profiling data is stack data[[,]]:

encode the difference information as an unsigned quantity with reference to a set of commonly occurring stack difference values, and

reconstruct a sign of a ~~the~~ stack difference value from a context of one of:

function entry and function exit,

accumulate the difference information, and

compress the difference information such that the type of probe is independent of the type of profiling data.

19. (currently amended) A computer arrangement comprising:

at least one probe, configured to collect profiling data during execution of an application; and

a buffer, configured to:

determine difference information as a function of the type of profiling data, ~~and~~

respond to the difference information satisfying a size constraint by encoding the difference information with reference to a set of commonly occurring difference values for the ~~a~~ type of ~~the~~ profiling data,

accumulate the difference information, and

compress the difference information such that the type of probe is independent of the type of profiling data.

20. (currently amended) The computer arrangement of claim 19, wherein the buffer is further configured to, before determining the difference information, store an initial counter value for the profiling data ~~to be compressed~~.

21. (currently amended) The computer arrangement of claim 19, ~~wherein the buffer is further to configured to accumulate the encoded difference information, and~~ wherein the computer-executable modules further comprise a logger, configured to receive and store the contents of the buffer in a profiling data file in response to the buffer accumulating a predetermined amount of difference information.

22. (original) The computer arrangement of claim 21, wherein the buffer is further configured to, in response to accumulating the predetermined amount of difference

information, ~~compress the contents of the buffer and~~ transfer the compressed contents to the logger.

23. (original) The computer arrangement of claim 19, wherein the buffer is further configured to, if the difference information is timestamp difference information, encode the difference information as an unsigned quantity with reference to a set of commonly occurring timestamp difference values.

24. (currently amended) The computer arrangement of claim 19, wherein the buffer is further configured to[[,]]:

if the difference information is stack difference information, encode the difference information as an unsigned quantity with reference to a set of commonly occurring stack difference values, and

reconstruct a sign of a ~~the~~ stack difference value from a context of one of: function entry and function exit.

25. (original) The computer arrangement of claim 19, wherein the buffer is further configured to, if the difference information is stack difference information, divide a quantity represented by the difference information by four before encoding the difference information.

26. (currently amended) The computer arrangement of claim 19, wherein the buffer is further configured to, if the profiling data is ~~to be compressed represents~~ stack data ~~information~~ collected upon entry to and exit from a function, record a single difference value for the stack data ~~information~~.

27. (currently amended) A computer arrangement comprising:

at least one probe, configured to collect profiling data during execution of an application; and

a buffer, configured to:

determine difference information as a function of the type of collected profiling data,

if the type of profiling data is timestamp data, encode the difference information as an unsigned quantity with reference to a set of commonly occurring timestamp difference values, and

if the type of profiling data is stack data:~~,~~

encode the difference information as an unsigned quantity with reference to a set of commonly occurring stack difference values, and

reconstruct a sign of a ~~the~~ stack difference value from a context of one of: function entry and function exit,

accumulate the difference information, and

compress the difference information such that the type of probe is independent of the type of profiling data.

Claims 28-33 (cancelled)